Networking Management system Protocol

User's Manual

CTC union CTC UNION TECHNOLOGIES CO., LTD.

Content

Introduce

Chapter 1: Installation
- Section 1: Hardware
- Section 2: Software
- Section 3: How to install

Chapter 2: How to start the system
- Section 1: Starting the system
- Section 2: Login the system
- Section 3: Change the password
- Section 4: Configuration
  1. COM port configuration
  2. Edit the polling time
- Section 5: Enter the system
- Section 6: Diary
- Section 7: Enter managing system for ERM-MUX
  1. The configuration setting and display message for E1 card
  2. The configuration setting and display message for Sub-E1 card
  3. The configuration setting and display message for N*64K card
  4. The configuration setting and display message for 64K/128K card
  5. The configuration setting and display message for ASYNC card
  6. The configuration setting and display message for X.50 card
  7. The configuration setting and display message for Voice (FXSO)card
  8. The configuration setting and display message for Voice (E&M)card
- Section 8 : Enter managing system for ETU03
- Section 9 : Enter managing system for ETU-DXC
- Section 10: Urgent alarm message
- Section 11: Connection Management
- Section 12: Operator Management
- Section 13: Logout the system

Introduce

- **Environment**

The NMP (Networking Management system Protocol) is available for Windows95/98/2000/NT4.0 operating platform.

- **Features**

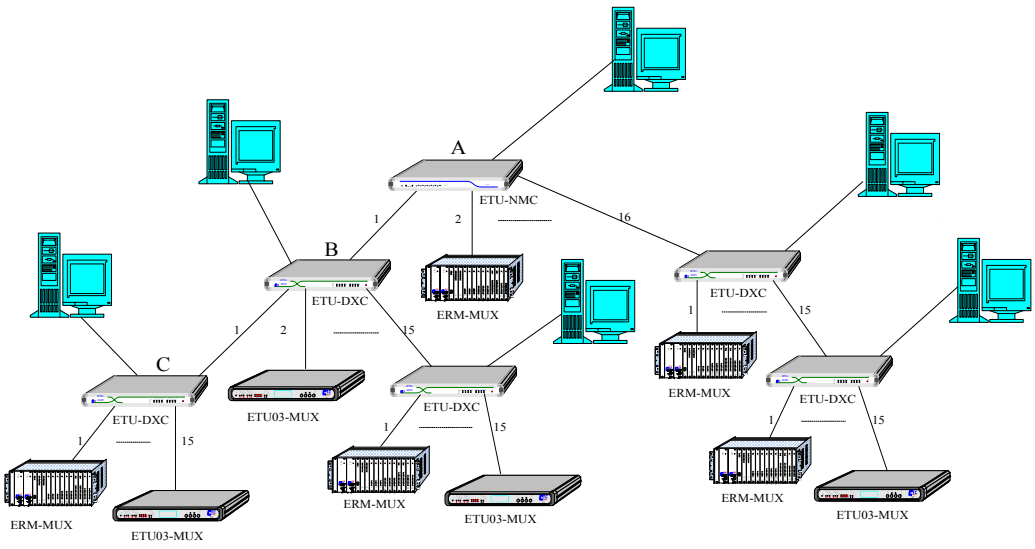
This NMP uses the graph-icon display, enables the network users to set the configurations by simply clicking the mouse, instead of remembering the varied commands.

This NMP contains a lot of functions, high-security system, easy to learn and operate. This NMP also specialize in the trapping management, Configuration management, security management.

The NMP is available for the following models :

- NMC
- ETU-DXC
- ERM-MUX
- ETU03-MUX

Structuring drawing



- Level-setting Management

This NMP can set the different level for administration management. In the other words, the whole network can only has one top-level(first-level) user. This way, you may control the whole network.

The whole networking structure consists of three-levels equipments of DXC (or use the NMC as the first-level, use the DEX as the other two levels). Just connects the PC terminal with the equipment through the LOG connections. Then you may practice the management.

One thing needs to noticed is that if you want to use the multi-levels management, ensure that all the PC terminals have the same IP address. This way you can make sure that all the data is synchronized.

For the multi-levels networking management, except the top-level (first-level) can manage the whole network. The other two level users can only management the certain area.

- IP Address

In order to solve the routing problem, all the equipments are managed under this network all have the same IP address. The difference is this IP address here. It is different from the common IP address. You may check the table below to understand it.

The format:

A	B	C	Type

Address Sections	Range	Meanings
A	00	00： Networking Management
B	|	01： DXC Equipment
C	|	02-33： CH1/LINE1-CH16/LINE32
	33	

Type	01	01:ERM-MUX
	02	02:ETUO3
	03	03:ETU-DXC
	04	04:MANAGER
	05	05:NMC
	06	06:SUB E1
	07	07:ERM-DXC

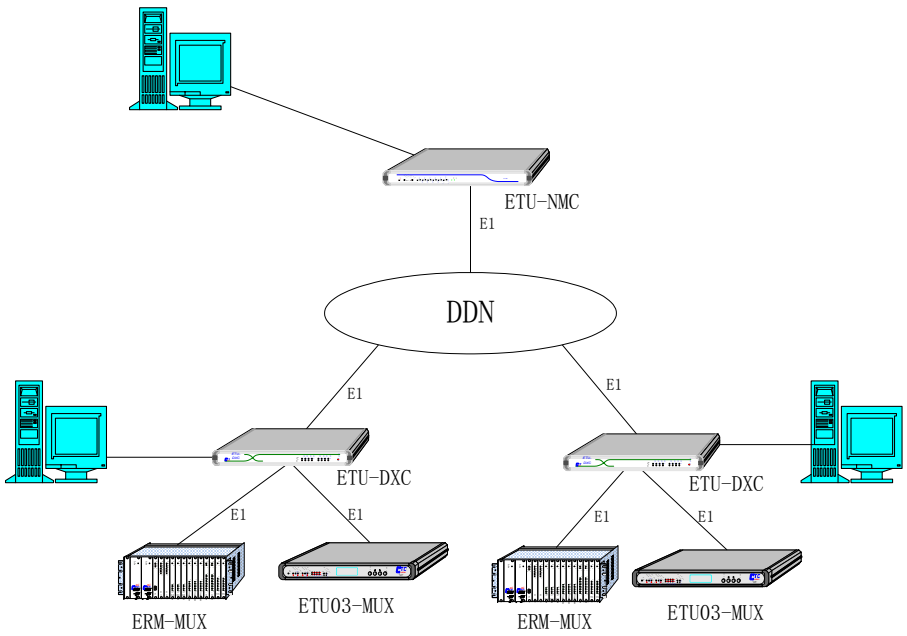
- **Administration**

Networking management system covers the in-band and out-band.

In-band Networking Management

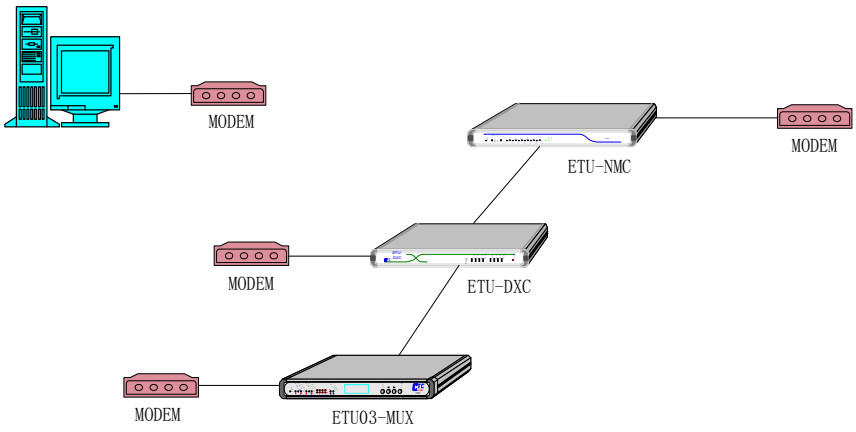
The management signal is covered in one of the E1 timeslot. It totally depend on the DDN itself. Doesn't need the other channel for transmitting.

The bottom-level(the third-level) equipment drop one E1 timeslot message to the upper-level equipment. The upper-level equipment will channelize the router and put all the collected data together in one E1 timeslot. Then the message will keep going up to another level.



Out-band Networking Management

The management signal will go through the dial-up line to the PSTN. Under this, every equipments under this management system all require to connect with its own MODEM.



- **Management Function**

The networking management offers: Trapping management, security management and configuration-setting management.

➢ Trapping Management

It includes to locate all the problems and mistakes which occurred in whole network. It consist of three steps.

- ✓ Discover the problem.
- ✓ Separate the possible factors and find out the main cause.
- ✓ Fix the problem.

Within this function, the administrator of the network can locate and fix the problem more quickly.

Diary offers the inquiry-request and the calculation-request and print-out the report. So the user can understand clearly all the dealing process including the time, place and what unit went wrong.

- Configuration Management

The right position of unit is the major factor of running the system well or not. The Configuration management include the whole process of the configuration setting.

Within this function, it power the user to distribute the whole system. The administrator can change the position of any units easily to match the system setting.

Configuration Management offers :

- ✓ To gain the message about any unit's correct position.
- ✓ To edit the system setting from the remote-side.
- ✓ To store the data of setting, also can maintain the latest list of whole system.
- ✓ To run the system more smoothly, this management also offers the switch between the auto and manual connection add-in or delete.

- Security Management

The security management is to monitor the process of sending message.

This function offers the administrator to set different security level on management. To avoid unnecessary damage on the network. There are three levels for this function. They are system administrator, configuration administrator and the visitor. On the system administrator level: You can add-in and delete the new network administrator, edit the message. Also can set the configurations , check the status of any equipments. This level is the top-level in the security management. Configuration administrator can only set the configurations and check the content of message. Its level is lower than system administrator. The visitor can only check the content of message. Level of the visitor is the lowest.

- **Human-design Platform**

The whole networking management uses the window & pop-out menu for display the status & functions and mouse for operating. This way the administrator can easy to operate and learn how to run the management system.

Chapter 1：Installation

Section 1：Hardware

1． 586PC PC586 Above(Monitor Display pixel suggestion is 1024×768)

Section 2：Software

1． Management software
2． Database software

Section 3：How to install

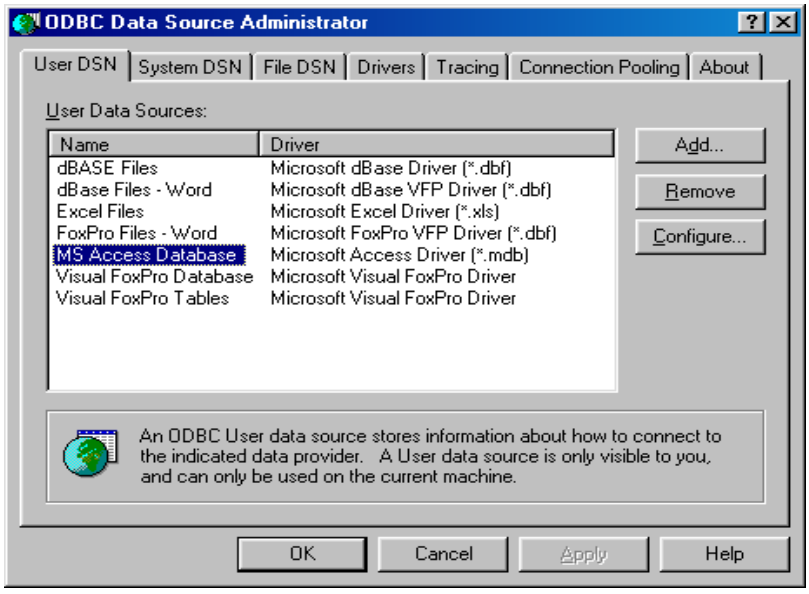
Networking management software is based on window-operating such as Window NT & Window 95/98/2000. Before you install the software please set the monitor displaying pixel to 1024×768.

How to install the management software

Insert the CD-ROM, go to the menu and execute the SETUP.EXE. It will start to install itself. During the process it may indicate some failing message about the registration. If the document in your disk is original please ignore it.

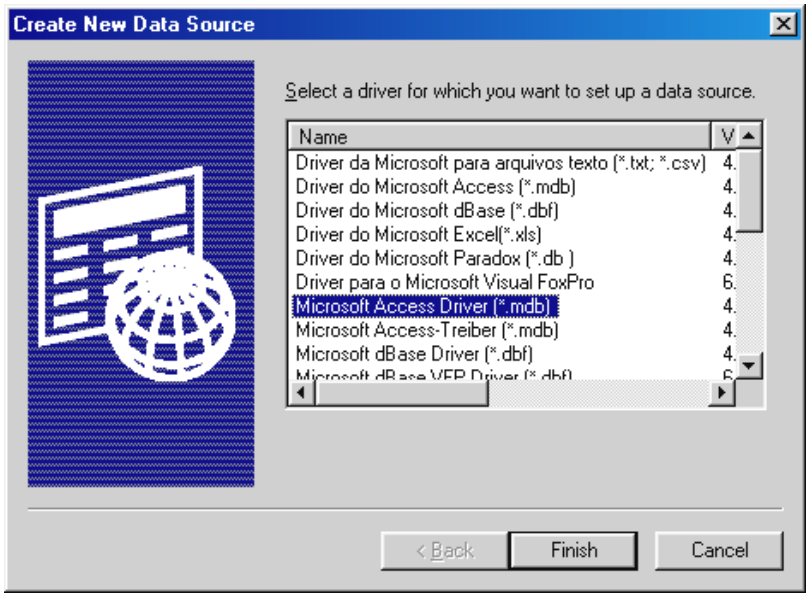
1． ODBC The Configuration for Database

When you start the networking management software at first time, it will go to the window as the picture 3-3 and automatically configured itself. If the configuration-setting is failed then the system won't be able to run normally. You need to do the setting manually. Manually configure the database source: Go to the control menu. Double-click the icon of the ODBC database to start the database source administrator (Picture 1-1).

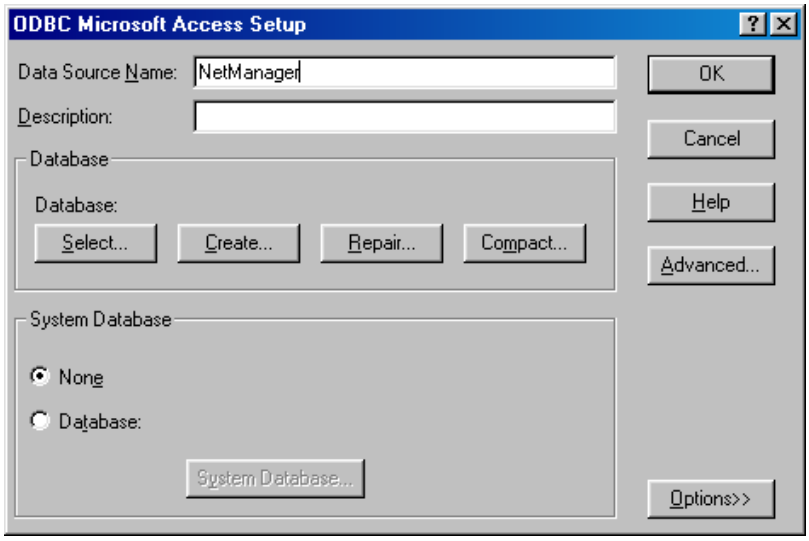


Picture1-1

Choose the “user DSN” on the database source administrator menu. And click the add “add” and then you will go to the window of “Create New Data Source”. Select “Microsoft Access Driver (*.mdb)” and click “finish”(Picture1-2). The window of “ODBC Microsoft Access Setup” will display here. Input the file name as “NetManager”. Click the “select” at the database and go the file called snmp.mdb which its position is at D:\…\Snmp\NewSnmp\MDB\snmp.mdb (Picture1-3) Click “OK” and the management software installation is successful.


Create New Data Source
Select a driver for which you want to set up a data source.
Name
Driver da Microsoft para arquivos texto (*.txt; *.csv)
Driver do Microsoft Access (*.mdb)
Driver do Microsoft dBase (*.dbf)
Driver do Microsoft Excel(*.xls)
Driver do Microsoft Paradox (*.db)
Driver para o Microsoft Visual FoxPro
Microsoft Access Driver (*.mdb)
Microsoft Access-Treiber (*.mdb)
Microsoft dBase Driver (*.dbf)
< Back
Finish
Cancel

Picture1-2



Picture1-3

Chapter 2 How to Use

Section 1: How to run the program

If the installation is complete then click the start button on the bottom of the Window 95/98/2000 or Window NT screen. Go to the "Programs" and click the "Networking Management system Protocol".

Section 2: Login the system

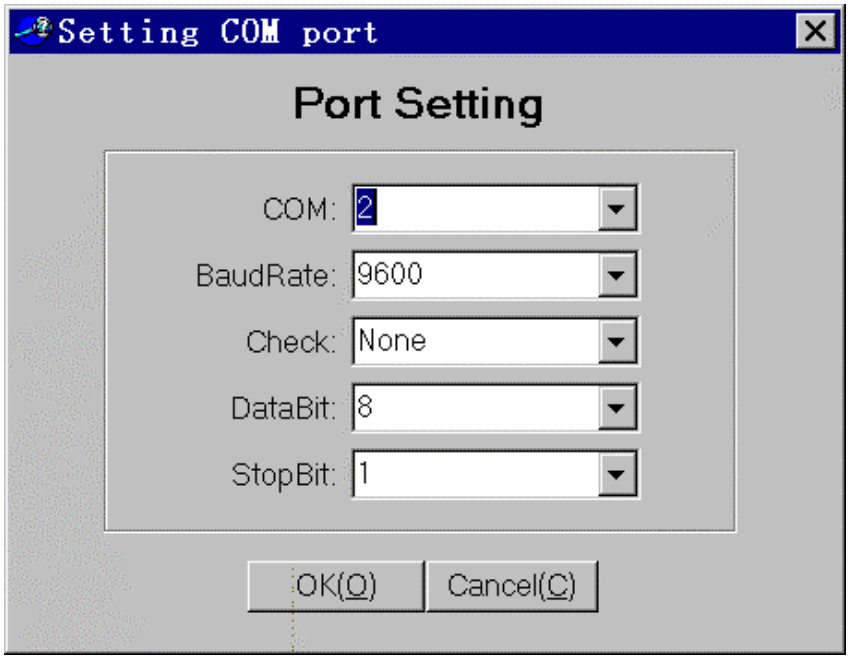
Input the user name, password and choose the type of the networking management (in-band or out-band). The default value for the user name is "Admin", for the password is none and for the networking management type is in-band. Suggest once you login the system, change the password as your own password. You can input up to 8 digits for the password.

Section 3: Change the password

If you click "change password" at the login window, you will go to the window of "change password". Input the old password and the new password for twice to confirm with the system.

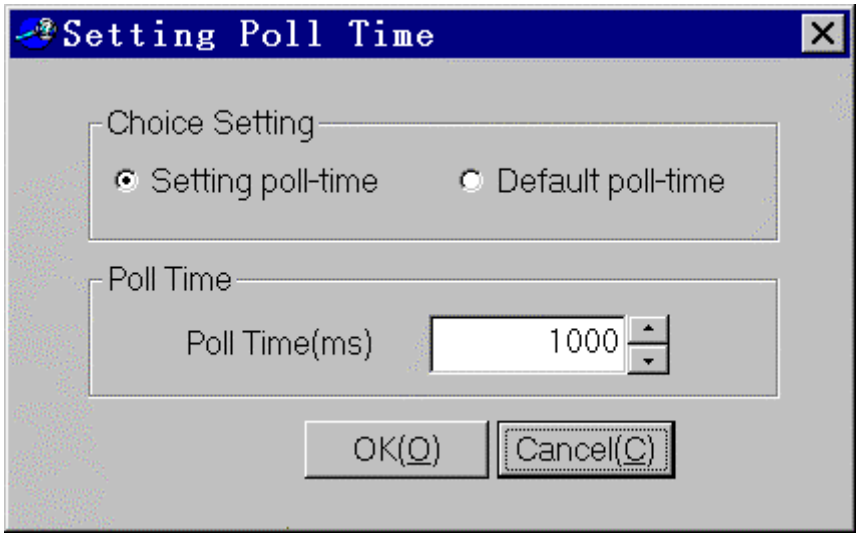
Section 4: Configuration

On the main menu of the networking management program, choose the "Serial Port Configuration". Input the values as the picture shown below (picture 2-1).



(Picture 2-1)

If the serial port doesn't response then the dialogue window will display (picture2-2). Polling time is the system monitor every unit's status duration period, including the alarm and the application. If the polling duration is shorter, that mean each unit will be polled more often. But if the duration period is too short then system may get short. So the suggest duration period is one to three seconds. The default value for this is one second.



(Picture 2-2)

Section 5: Enter the system

When you first time enter the system, the whole network structure is empty. At the main menu of system, choose the "Edit the Network"(Picture 2-3). You can see the screen is divided into two parts. On the left-part of the screen, they are the different model icon for modification. When the user want to add the new unit, just have to click on the unit icon and put it into the structure map on the right-part. The image size of the unit icon can be also modified.

Once the unit is added in here, the window of "Add new unit" will appear. Input the reference information for the new unit (Picture 2-4)

On the right-part, you may connect the units with the lines to form the network structure. Under the "Edit the Network" command, you may use the right mouse click the unit icon. A message box will appear and you can set the status of each unit in the system. Include the "Rebuild" and "Delete" functions. You can also click the unit icon and drag it to the position you want in the structure map. Click the "Save the Network Structure" then the window (Picture2-4) will appear.

- Set ETU-DXC as the first level on the networking management system (Picture2-5). The networking management type is local control.
- With the Networking Management Center (NMC), PC terminal can manage ETU-DXC, ETU03 and ERM-MUX. Use the DB9 cable to connect PC terminal

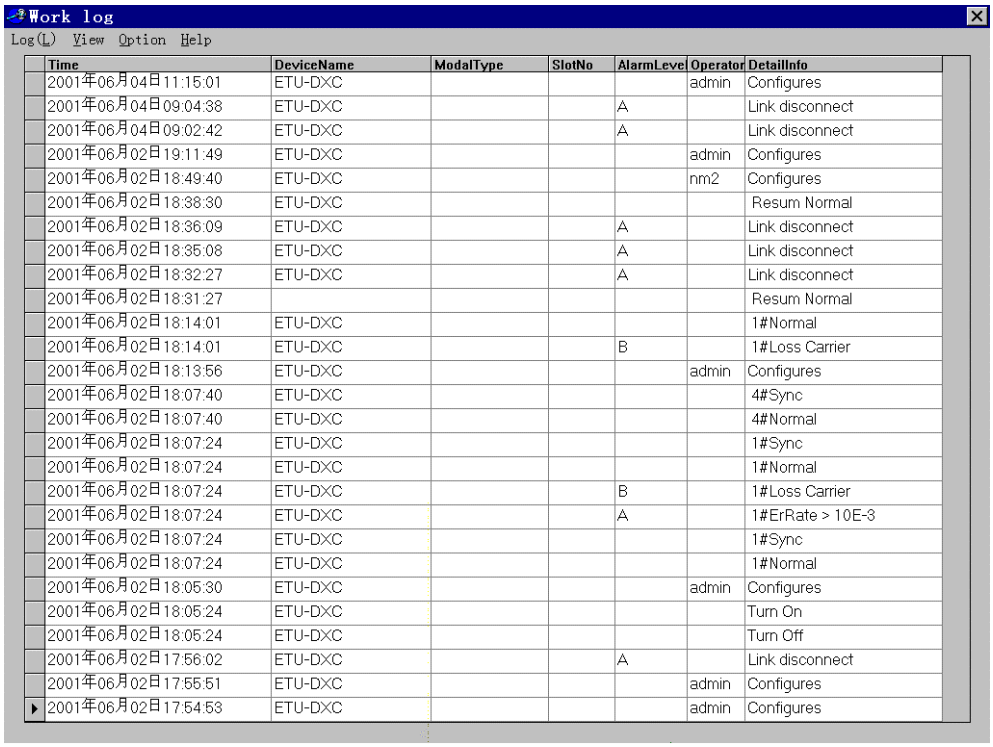
COM port with the RS-232 serial port. Set the timeslot channels of the unit connect with NMC has to be the same as the NMC's. Managing level is 2 and the type of networking management is remote. The connected units on next layer will be on the managing level 3. The type of networking management is also remote.

- Without the NMC, PC terminal still can manage ETU-DXC, ETU03 and ERM-MUX. Use the cross DB9 cable to connect PC terminal COM port with the local control port (RS-232 DCE port) on the ETU-DXC. The connected units on next layer will be on the managing level 2. The type of networking management is also remote. The timeslot channels of the units connect with ETU-DXC has to be the same as the ETU-DXC

When all the configuration settings are complete, restart the system then you should be able to use all the functions from the system.

Section 6: Diary

On the main menu bar, click the "Diary". The "Diary" window will appear here (Picture2-6). It can manage all happened events under the system.



Time	DeviceName	ModalType	SlotNo	AlarmLevel	Operator	DetailInfo
2001年06月04日11:15:01	ETU-DXC				admin	Configures
2001年06月04日09:04:38	ETU-DXC			A		Link disconnect
2001年06月04日09:02:42	ETU-DXC			A		Link disconnect
2001年06月02日19:11:49	ETU-DXC				admin	Configures
2001年06月02日18:49:40	ETU-DXC				nm2	Configures
2001年06月02日18:38:30	ETU-DXC					Resum Normal
2001年06月02日18:36:09	ETU-DXC			A		Link disconnect
2001年06月02日18:35:08	ETU-DXC			A		Link disconnect
2001年06月02日18:32:27	ETU-DXC			A		Link disconnect
2001年06月02日18:31:27						Resum Normal
2001年06月02日18:14:01	ETU-DXC					1#Normal
2001年06月02日18:14:01	ETU-DXC			B		1#Loss Carrier
2001年06月02日18:13:56	ETU-DXC				admin	Configures
2001年06月02日18:07:40	ETU-DXC					4#Sync
2001年06月02日18:07:40	ETU-DXC					4#Normal
2001年06月02日18:07:24	ETU-DXC					1#Sync
2001年06月02日18:07:24	ETU-DXC					1#Normal
2001年06月02日18:07:24	ETU-DXC			B		1#Loss Carrier
2001年06月02日18:07:24	ETU-DXC			A		1#ErRate > 10E-3
2001年06月02日18:07:24	ETU-DXC					1#Sync
2001年06月02日18:07:24	ETU-DXC					1#Normal
2001年06月02日18:05:30	ETU-DXC				admin	Configures
2001年06月02日18:05:24	ETU-DXC					Turn On
2001年06月02日18:05:24	ETU-DXC					Turn Off
2001年06月02日17:56:02	ETU-DXC			A		Link disconnect
2001年06月02日17:55:51	ETU-DXC				admin	Configures
2001年06月02日17:54:53	ETU-DXC				admin	Configures

(Picture 2-6)

Alarm message display content format :

Parameters	Display Message	Details
Unit status	On-line	On-line
	Off-line	Off-line
Module number	1#	95144 Controlling module
	2#	LCD module
	3#	EIA module
	4#	EIB module
	5#	X.50 A module
	6#	Sync A module
	7#	X.50 B module
	8#	Sync B module
	9#	SRAM module
Alarm message	Recovery	Recovery
	Alarm	Alarm
	Sync	Sync
	Async	Async
	Pattern normal	Pattern normal
	Pattern loss	Pattern loss
	Bit-Error >10-4	Bit-Error >10-4
	Bit-Error >10-3	Bit-Error >10-3
	Bit-Error =0	Bit-Error =0
	No loopback	No loopback
	Local loopback	Local loopback
	Remote loopback	Remote loopback
	Loopback from remote to local	Loopback from remote to local
	Remote recovery	Remote recovery
	Remote alarm	Remote alarm
Alarm duration period	XX/Year XX/Month XX/Day XX/Hour XX/Min. XX/Sec.	XX/Year XX/Month XX/Day XX/Hour XX/Min. XX/Sec.

The system will display all the message and store all the events into the diary. So the user can read the diary to understand all the happened events. On the pull-down menu for “Diary”, advanced-find window will help you to find the event you need. (Picture2-7)

Section 7:Enter managing system for ERM-MUX

On the main screen of the system, choose and double-click the unit icon of ERM-MUX. You will enter the managing status screen. (Picture2-8) After the system check the status of the ERM-MUX, the screen will display the detail of each slot. If you double-click the slot, it will tell you the slot status. You can also edit the configuration setting for the card. Here the message box will ask you if you want to go back to the default values.

1. The configuration setting and display message for E1 card

When you enter the screen of ERM-MUX and double-click the E1 card. The E1 card status screen will appear.(Picture2-9)

Information displayed on E1 card status window

Message	Value
Card status	Normal or Alarm
Sync	Sync or Async
Pattern	Normal or loss
Bit-Error	Under the allowance (<1%) or >=1%
BNC/RJ45	BNC or RJ45

Configuration setting for E1 card :

Parameters		Value	Remark
Working mode		Single E1, Double E1 Sub E1 or Two E1 (in redundant way)	
Clock mode		Recovery clock Internal oscillating clock Sub clock External clock*	Only when slot #6 inserts with the Nx64 card or 64K/128K card
Relay mode		CCS or CAS	CCS (use timeslot #31) CAS (use timeslot #30, can't use timeslot #16)
CRC4		With CRC4 or without	
Loopback		None, Local, Remote or loopback from remote to local	
Code		HDB3 or AMI	
Idle		Enable or disable	
Input impedance RXZ		-20DB or –43DB	
Jitter	Allow	Enable or disable	
	Tx & Rx	Tx or Rx	Tx&Rx and Length setting only under when "allow" in enable.
	Length	128 or 32	

Press "Save the setting" or "Alt" and "S" key to save the setting and the message box will appear to tell you to wait the system to save.
Press "Exit" or "Alt" and "X" key to exit and abort the editing, then you will return to the main screen.

2. The configuration setting and display message for Sub-E1 card

When you enter the screen of ERM-MUX and double-click the Sub-E1 card. The Sub-E1 card status screen will appear.(Picture2-10)
Information displayed on Sub- E1 card status window

Parameters	Value
Slot #	Slot #2~Slot #11
Status	Normal or Alarm

Configuration setting for Sub-E1 card :

	Parameters	Value
Channel #1	E1 card type	E1A or E1B
	Clock mode	Internal oscillating clock External clock
	Loopback	None or Remote
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
	Pattern	Normal or loss
	Sync	Sync or Async
Channel #2	E1 card type	E1A or E1B
	Clock mode	Internal oscillating clock External clock
	Loopback	None or Remote
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
	Pattern	Normal or loss
	Sync	Sync or Async
Channel #3	E1 card type	E1A or E1B
	Clock mode	Internal oscillating clock External clock
	Loopback	None or Remote
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
	Pattern	Normal or loss
	Sync	Sync or Async

Press “Save the setting” or “Alt” and “S” key to save the setting and the message box will appear to tell you to wait the system to save. Press “Exit” or “Alt” and “X” key to exit and abort the editing, then you will return to the main screen.

3. The configuration setting and display message for N*64K card

When you enter the screen of ERM-MUX and double-click the N*64K card. The N*64K card status screen will appear.(Picture2-11)

Information displayed on N*64K card status window

Parameters	Value
Slot #	Slot #2~Slot #11
Status	Normal or Alarm

Configuration setting for N*64K card :

	Parameters	Value
Channel #1	E1 card type	E1A (Master E1) or E1B (SlaveE1)
	DCE/DTE option	DCE or DTE
	Clock mode	Internal oscillating clock External clock
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
Channel #2	E1 card type	E1A or E1B
	DCE/DTE option	DCE or DTE
	Clock mode	Internal oscillating clock External clock
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available

Press “Save the setting” or “Alt” and “S” key to save the setting and the message box will appear to tell you to wait the system to save. Press “Exit” or “Alt” and “X” key to exit and abort the editing, then you will return to the main screen.

4. The configuration setting and display message for 64K/128K card

When you enter the screen of ERM-MUX and double-click the 64K/128K card. The 64K/128K card status screen will appear.(Picture2-12)

Information displayed on 64K/128K card status window

Parameters	Value
Slot #	Slot #2~Slot #11
Status	Normal or Alarm

Configuration setting for 64K/128K card :

	Parameters	Value
Channel #1	E1 card type	E1A or E1B
	Clock mode	Internal oscillating clock External clock
	DCE/DTE option	DCE or DTE
	Timeslot #1	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
	Timeslot #2	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
Channel #2	E1 card type	E1A or E1B
	Clock mode	Internal oscillating clock External clock
	DCE/DTE option	DCE or DTE
	Timeslot #1	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
	Timeslot #2	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available

Channel #3	E1 card type	E1A or E1B
	Clock mode	Internal oscillating clock External clock
	DCE/DTE option	DCE or DTE
	Timeslot #1	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
	Timeslot #2	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available

Press “Save the setting” or “Alt” and “S” key to save the setting and the message box will appear to tell you to wait the system to save. Press “Exit” or “Alt” and “X” key to exit and abort the editing, then you will return to the main screen.

5. The configuration setting and display message for ASYNC card

When you enter the screen of ERM-MUX and double-click the ASYNC card. The ASYNC card status screen will appear.(Picture2-13)

Information displayed on ASYNC card status window

Parameters	Value
Slot #	Slot #2~Slot #11
Status	Normal or Alarm

Configuration setting for ASYNC card :

	Parameters	Value
Channel #1	E1 card type	E1A or E1B
	Clock mode	Internal oscillating clock External clock
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available

Channel #2	E1 card type	E1A or E1B
	Clock mode	Internal oscillating clock External clock
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available

Press “Save the setting” or “Alt” and “S” key to save the setting and the message box will appear to tell you to wait the system to save. Press “Exit” or “Alt” and “X” key to exit and abort the editing, then you will return to the main screen.

6. The configuration setting and display message for X.50 card

When you enter the screen of ERM-MUX and double-click the X.50 card. The X.50 card status screen will appear.(Picture2-14)

Information displayed on X.50 card status window

Parameters	Value
Slot #	Slot #2~Slot #11
Status	Normal or Alarm

Configuration setting for X.50 card :

Parameters		Value
E1 card type		E1A or E1B
Stop bit		0 or 1
Loopback		None or loopback
Timeslot		Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
Channel #1	Rate	2400, 4800, 9600 or 19200
	Transmission mode	Sync or Async
	Clock mode	Internal oscillating clock External clock
	Code package size	8,9,10 or 11
	Loopback	None or loopback

Channel #2	Rate	2400, 4800, 9600 or 19200
	Transmission mode	Sync or Async
	Clock mode	Internal oscillating clock External clock
	Code package size	8,9,10 or 11
	Loopback	None or loopback
Channel #3	Rate	2400, 4800, 9600 or 19200
	Transmission mode	Sync or Async
	Clock mode	Internal oscillating clock External clock
	Code package size	8,9,10 or 11
	Loopback	None or loopback
Channel #4	Rate	2400, 4800, 9600 or 19200
	Transmission mode	Sync or Async
	Clock mode	Internal oscillating clock External clock
	Code package size	8,9,10 or 11
	Loopback	None or loopback
Channel #5	Rate	2400, 4800, 9600 or 19200
	Transmission mode	Sync or Async
	Clock mode	Internal oscillating clock External clock
	Code package size	8,9,10 or 11
	Loopback	None or loopback

Press “Save the setting” or “Alt” and “S” key to save the setting and the message box will appear to tell you to wait the system to save. Press “Exit” or “Alt” and “X” key to exit and abort the editing, then you will return to the main screen.

7. The configuration setting and display message for Voice card (FXSO)

When you enter the screen of ERM-MUX and double-click the voice card. (FXSO) The voice card status screen will appear.(Picture2-15)

Information displayed on voice card status window

Parameters	Value
Slot #	Slot #2~Slot #11
Status	Normal or Alarm
Connecting type	FXS or FXO

Configuration setting for voice card :

	Parameters	Value
Channel #1	E1 card type	E1A or E1B
	Work mode	Normal or hot-line
	Loopback	None or loopback
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
Channel #2	E1 card type	E1A or E1B
	Work mode	Normal or hot-line
	Loopback	None or loopback
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
Channel #3	E1 card type	E1A or E1B
	Work mode	Normal or hot-line
	Loopback	None or loopback
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
Channel #4	E1 card type	E1A or E1B
	Work mode	Normal or hot-line
	Loopback	None or loopback
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available

Press “Save the setting” or “Alt” and “S” key to save the setting and the message box will appear to tell you to wait the system to save. Press “Exit” or “Alt” and “X” key to exit and abort the editing, then you will return to the main screen.

8. The configuration setting and display message for Voice card (E&M)

When you enter the screen of ERM-MUX and double-click the voice card. (E&M) The voice card status screen will appear.(Picture2-16)

Information displayed on voice card status window

Parameters	Value
Slot #	Slot #2~Slot #11
Status	Normal or Alarm
Connecting type	FXS or FXO

Configuration setting for voice card :

	Parameters	Value
Channel #1	E1 card type	E1A or E1B
	Work mode	Normal or hot-line
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
Channel #2	E1 card type	E1A or E1B
	Loopback	None or loopback
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
Channel #3	E1 card type	E1A or E1B
	Loopback	None or loopback
	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available
Channel #4	E1 card type	E1A or E1B
	Loopback	None or loopback

	Timeslot	Four colors represent different status. Yellow→the card is occupied. Pink→this timeslot is exclusively for unit. Red→other card is occupied. Green→available

Press “Save the setting” or “Alt” and “S” key to save the setting and the message box will appear to tell you to wait the system to save. Press “Exit” or “Alt” and “X” key to exit and abort the editing, then you will return to the main screen.

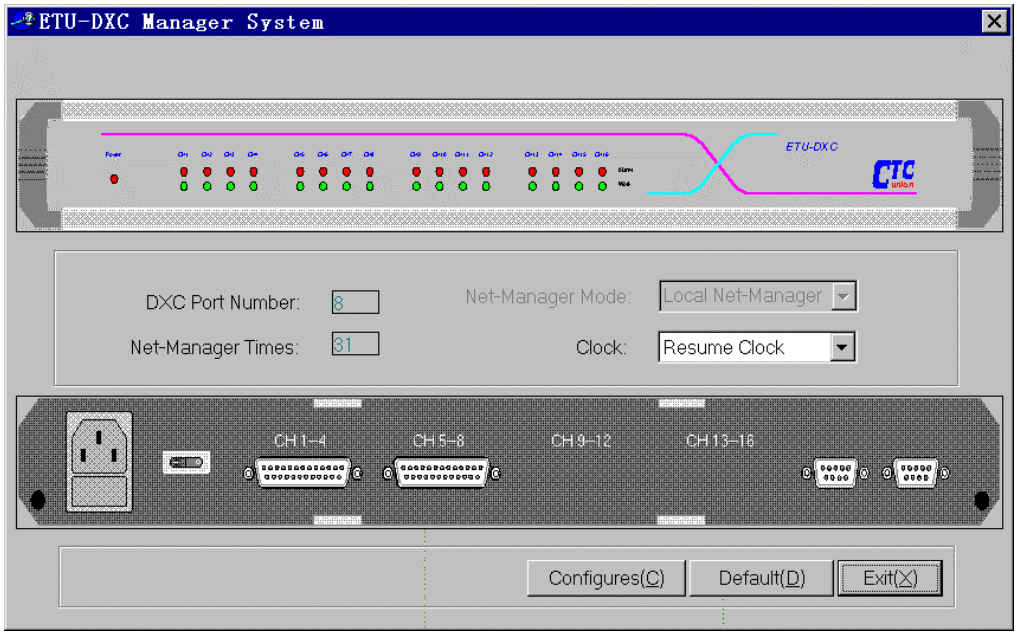
Section 8: Enter managing system for ETU03

On the main screen of the system, choose and double-click the unit icon of ETU03. You will enter the managing status screen. (Picture2-17)

1. Click the “E1 timeslots configuration” and the detail window will appear. (Picture2-18) Sub-E1, N*64A and N*64B may occupy as many timeslots as they need. X.50A and X.50B may only occupy one timeslot. The timeslot once is occupied by the module then it can’t be occupied by the other one.
2. Configuration setting for the N*64 and 64/128K card

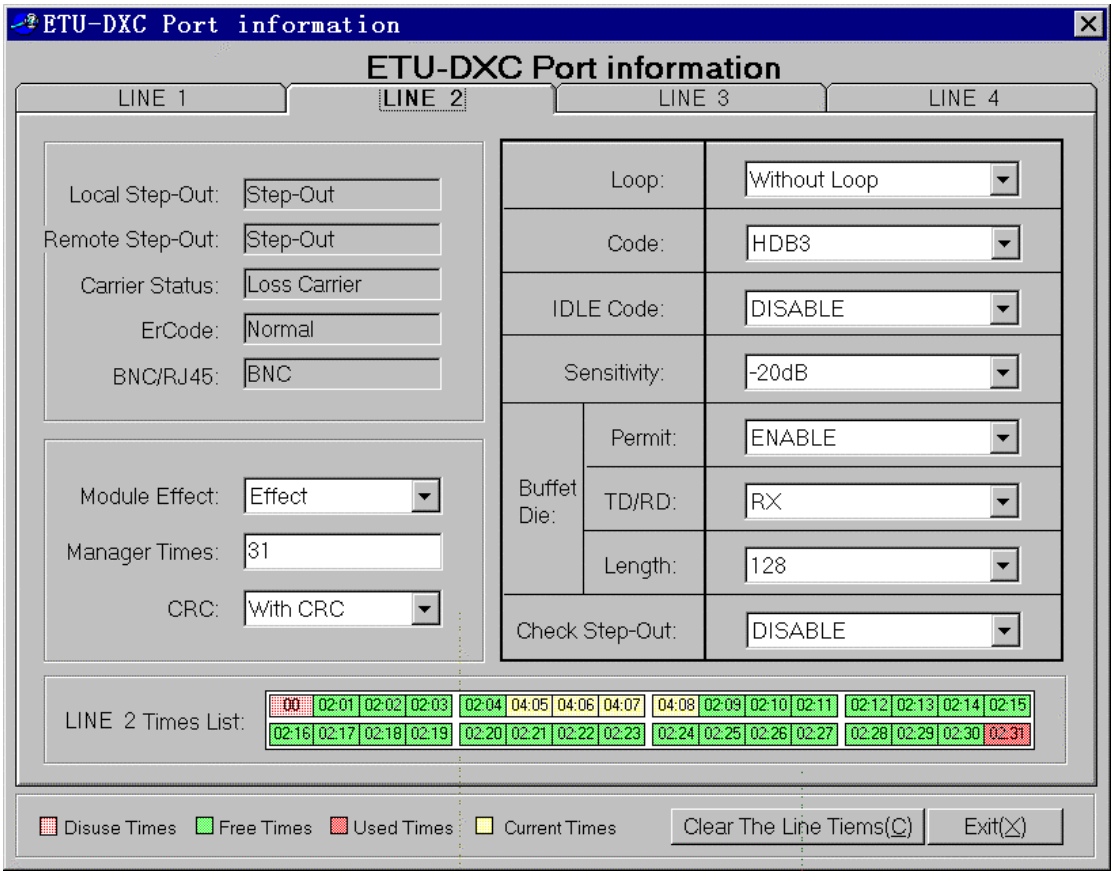
Section 9: Enter managing system for ETU-DXC

On the main screen of the system, choose and double-click the unit icon of ETU-DXC. You will enter the managing status screen. (Picture2-17) Including the front and rear panel.



1. Configurations setting for DXC-LINE

   You may click any of the four connectors in the rear panel on the managing status screen of ETU-DXC. Another window will appear here. (Picture 2-18)



(Picture 2-xx)

Each port has four line, there are totally 16 E1 ports in ETU-DXC. You can check the details for each E1 port on it.

E1 Timeslots list is consisted by the 2 lines & 16 columns, the colorful blocks. Each block represents one timeslot. So the first column on the first line will be the timeslot #00. The second column on the first line will be the timeslot #01 and so on. The timeslot #00 can't be occupied here. You can see in the timeslot #01 has "xx:xx". The first xx means this timeslot connects to which E1, the other xx means this timeslot connects to which timeslot. Four colors represent different status.

Yellow→You may modify the connected timeslot.

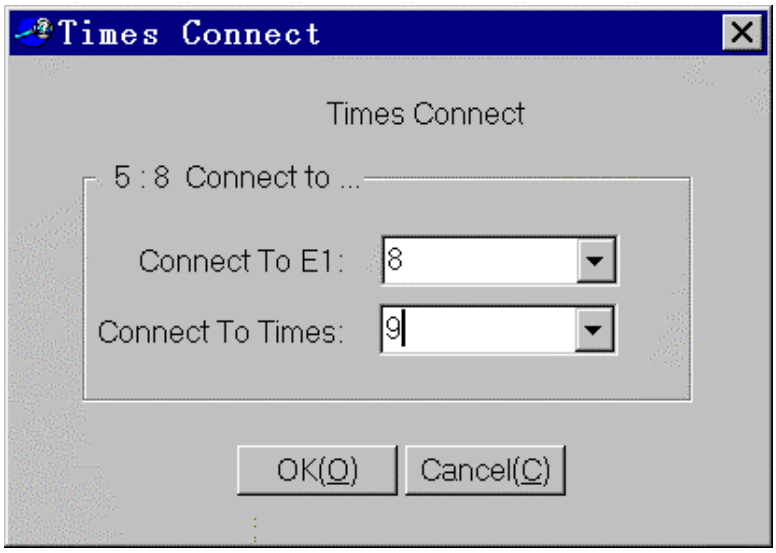
Pink→This timeslot is not available.

Red→This E1 is occupied this timeslot.

Green→This timeslot is available.

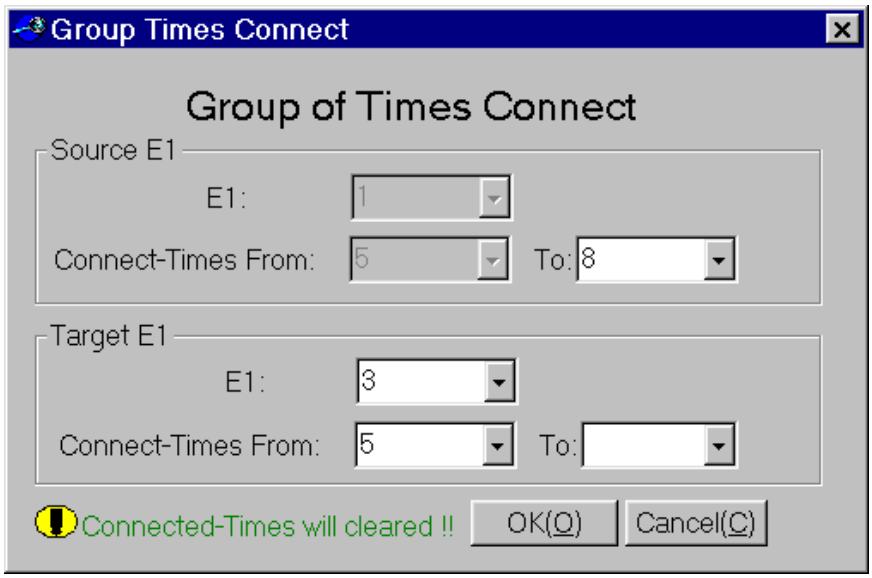
You may delete all the connections or modify the connections. Simply click the "clear all the connections" button on the window of "ETC-DXC Port information". Or you may modify the connections here, just move to cursor to the block you want to modify and click the mouse. The menu will appear, you may have "Timeslot Connect", "Connect A Group Times" and "Clear All Timeslots Connection" for options.

Press "Timeslot Connect" then the window will appear here. (Picture 2-xx) Just choose the E1 port # and timeslot # and the system will automatically connect each other.



(Picture 2-xx)

Press "Connect A Group Timeslots" then the window will appear here. (Picture 2-xx) Just choose the E1 port # and timeslots range and the system will automatically connect each other. The previous group connection will be replaced.



Only for the ETU-DXC setting, you will find there are “Save” for save the setting and “Clear” for clear the setting and back to the default setting.

Section 10: Urgent alarm message

If the alarm happens to any units under the system, the alarm message box will appear here to tell the user. Every happened alarm will be reported and recorded into the diary. So the user may browser the diary and understand what happened. Press the “OK” button, then it will go back to the main screen.

Section 11: Connection Management

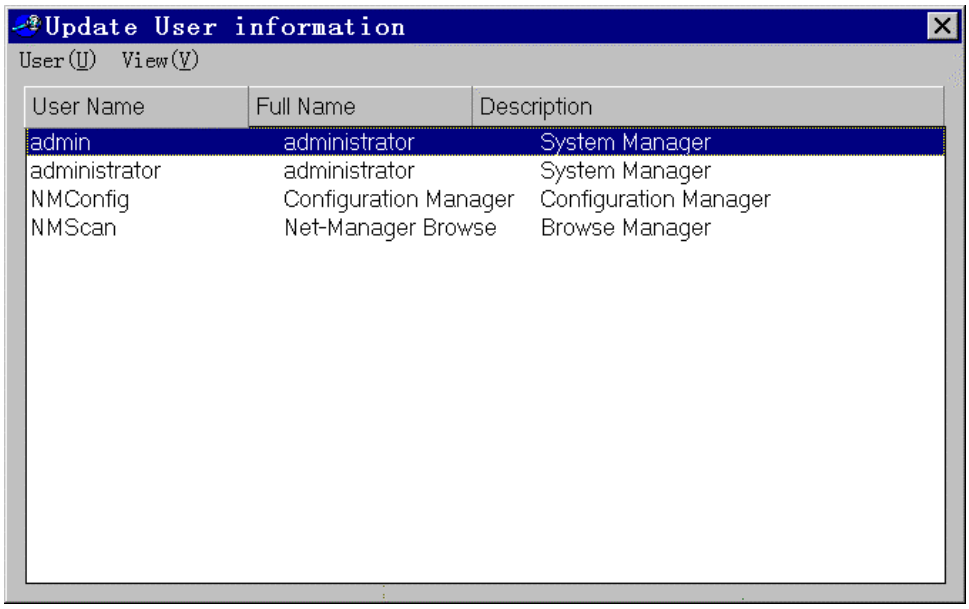
For the better and more smooth to connect every different modules between the different units. The system offers the auto-connect, manual-connect and auto-delete.

1. Auto-connect

   On the main screen of the system, choose the “Connection Management” at the menu bar. Click the “Auto-connect” then another window will appear. (Picture 2-xx) Click the “Auto-connect” on this window screen and system will start to connect automatically.

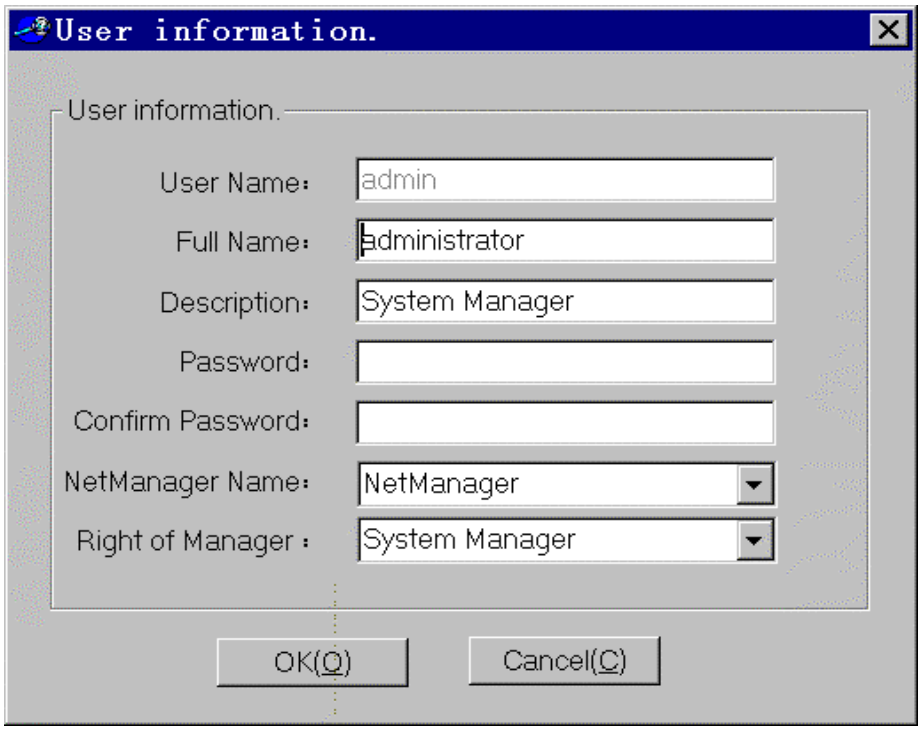
Section 12: Operator Management

On the main screen of system, choose the “Operator” at the menu bar. The window of “update user information” will appear. (Picture 2-xx)



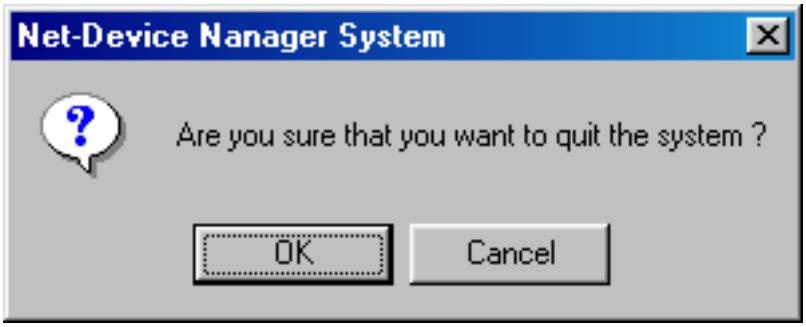
At window of “update user information”, there are pull down menu for the command “User” and “View”. You may add a new user, delete or rename the current user on the list and check out the property of them under the pull down menu of “User”. With the pull down menu of “View”, you may sort of the current users.

Double-click any user on the list display on this screen, the window of “user information” will appear for modify.



Section 12: Logout the system

At the main screen, choose the “File” at the menu bar. You may either login with another identification or you exit the system. If you click the “Exit”, the message box will appear. (Picture 2-xx)



Press the “OK” will exit the system. Press “Cancel” will go back to the system.